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When "sharing" means "stealing"

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UNIVERSITY OF ALBERTA

folio

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Research project hits a home run

Faculté Saint-Jean professor wins senior Fulbright award

By Geoff McMaster

Napoléon 'Larry' Lajoie is a curious figure in sports history. He holds the American League record for single-season batting average at .422 and had a lifetime average of .399.

A powerhouse hitter, Lajoie was the first player to be intentionally walked with the bases loaded. He was so popular in the early part of the 20th century that his fans voted to change the name of the Cleveland Broncos to the Naps (after Napoléon), before the team was again renamed the Indians. Lajoie's 1901 baseball card is reportedly worth hundreds of thousands of dollars, and one sport historian has called him the first modern American sports celebrity of any stripe.

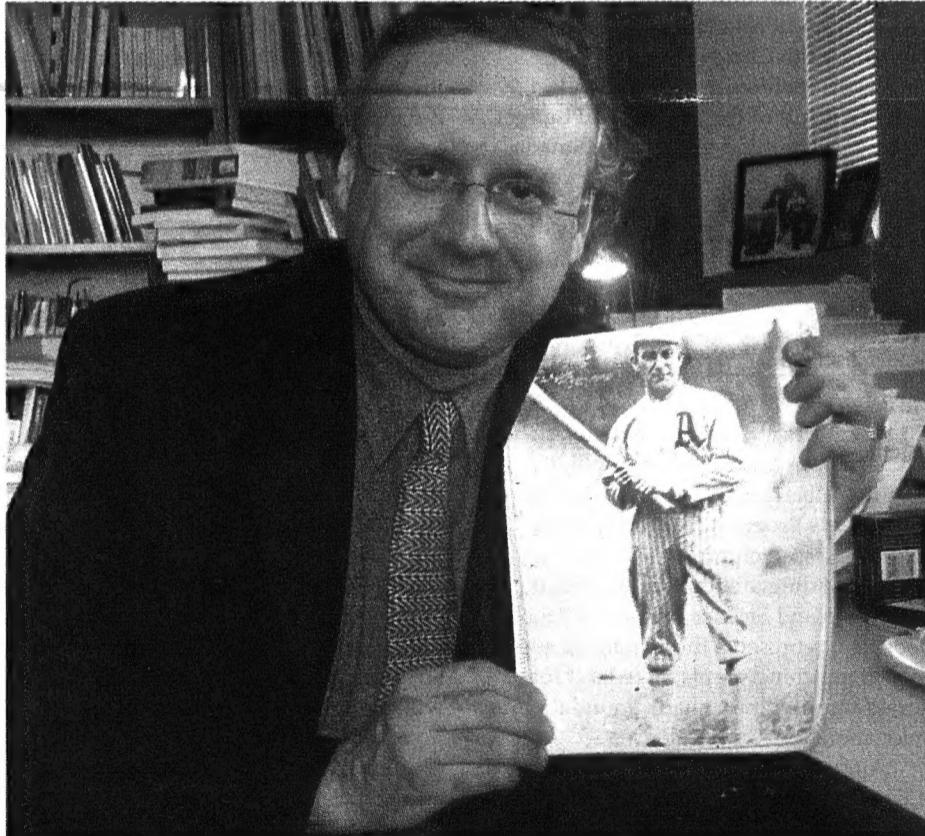
Lajoie's star, however, has long faded into obscurity. His contemporaries, Cy Young and Ty Cobb, are far more familiar names. Dr. Claude Couture, director of Canadian Studies at Faculté Saint-Jean has a theory about that.

"He had French-Canadian origins, and people can't pronounce his name," explained Couture. "That's why he was called Larry Lajoie, because people were butchering his name, and at one point someone called him Larry instead of Lajoie."

Couture is, of course, only half serious. The construction of Lajoie as a sports hero (or lack thereof) is a complicated problem, but one worth unraveling for a number of reasons, not the least of which is a better understanding of who we are as Canadians and Americans.

The American Fulbright Program also thinks Lajoie's story is worth pursuing, awarding Couture a \$25,000 (US) Fulbright Award to spend a year at the Jackson School (international studies) of Washington University in Seattle. He is the only senior U of A professor to win the prestigious award, meant to enhance understanding between the United States and Canada. The planned result is a book on national identities and sport to be released in the fall of 2005.

"In order to understand Canadian identity or French-Canadian identity or American identity, most of the work is done through political literature and insti-



Dr. Claude Couture, director of Canadian Studies at Faculté Saint-Jean, has earned a \$25,000 (US) Fulbright Award to study the story of Canadian baseball great Napoléon 'Larry' Lajoie, the way sports heroes are constructed and the way sports help define national identity.

tutions," said Couture. "But what I'm trying to do here is propose an interpretation of identity through the history of sport, based on the principle that sport produced very key narratives in the process of forging national identities."

Couture will therefore compare newspaper accounts of Lajoie's career in the Canadian and American press between 1896 and 1917, specifically the *Globe* and *La Presse* on the one hand, the *Philadelphia Inquirer* and *Cleveland News* on the other. He has already conducted the first part of the study, a comparison of the ways in which the press built a discourse around Lajoie as a national hero in Ontario and Quebec, especially after he retired from the American League in 1916 to manage and play for the Toronto Maple Leafs

baseball team.

At the height of the conscription crisis in Canada in 1917, there was considerable tension between French and English Canadians. But when the Maple Leafs were playing in Toronto, one-third of the fans in the stands were French Canadian, and everyone, French and English alike, cheered on Lajoie and his team.

"On the front page of the *Globe* you have this debate about conscription and almost vilification of the French Canadians who don't want conscription, then on the sports page you have Lajoie, this great hero. It's a fascinating contradiction," Couture said.

Another contradiction arises in the American press. Lajoie was the child of Quebec textile workers forced to leave the

province to find work in New England. Lajoie himself worked in a textile plant and fit neatly into baseball's affinity with the working class and the larger myth of the American dream. But when Lajoie once got into a fight with a teammate, the scribes immediately evoked his Gallic blood. He was at once 'one of us' and foreign to Americans.

The focus on Lajoie, however, will be just part of a more general examination of the role of sport in creating national mythologies, Couture said. How, for example, did baseball come to be America's national sport when it was just as popular in Canada until the second half of the 20th century?

In fact, he said, "it wasn't clear that hockey was more popular than baseball until the First World War." The main reason for America's lock on baseball was an odd American Supreme Court decision in 1922 that allowed major league baseball to escape anti-trust laws. "The monopoly was centered in the states, with no room for Canada. At the same time, hockey was becoming popular, so the decision left open possibilities for other sports."

One irony is that, in Lajoie's day, Quebec was regarded as a haven for talented black baseball players who wanted to escape discrimination. "It shows how complex our societies are, because Quebec is supposed to be this deeply racist society, and then all of a sudden you realize there was this more tolerant place for black players in Quebec...So from the history of sport, you can address larger issues about societies."

Couture admits many are skeptical of his line of research, one that looks to popular culture and its icons to shed light on complex social issues, regarding it as 'disconnected' from reality. But he defends cultural study, arguing that it often reveals truths more profound than do many forms of scientific inquiry.

"I would say the kind of work some people do in arts about culture is even more connected to reality than a very specialized and narrow technology, which is far from the daily life of anybody." ■

\$18 million for genomics research

Federal funds will spur a "revolution"

By Bev Betkowski

The gene chip Dr. Philip Halloran holds in his hand resembles an everyday gadget like a remote car-starter; not the little miracle that it is.

But the small square device, known as a microarray, is so precise in reading the human gene, it has the potential to predict, and perhaps ease the problems of organ transplant patients as they arise.

"This is a real revolution," Halloran said as he explained the chip's inner workings at a press conference at the University of Alberta Hospital April 13. "The new gene chip technology has as much potential for understanding diseases as the telescope had when Galileo first looked at the night sky."

The chip, equipped with a half-million squares to read all 30,000 human genes at once from one tissue sample, is one of two research projects receiving \$18 million in research funding announced by Genome Canada.

Over the next few years, Halloran, director of the Alberta Transplant Institute and a professor in the U of A Division of Nephrology and Transplantation Immunology, and his research team, will develop the gene chips as tests that can determine when organ rejection is present. This will help make patient care more effective, with fewer side effects.

That is good news for patients, said

Dr. Stephen Hnatko, who speaks from personal experience. The U of A professor of medical microbiology and immunology received a new kidney in 1994.

Many anti-rejection drugs are problematic to transplant patients, so "the sooner we can get a better drug with fewer side effects, the better off we'll be," Hnatko said. He hopes for the day when such drugs won't even be needed.

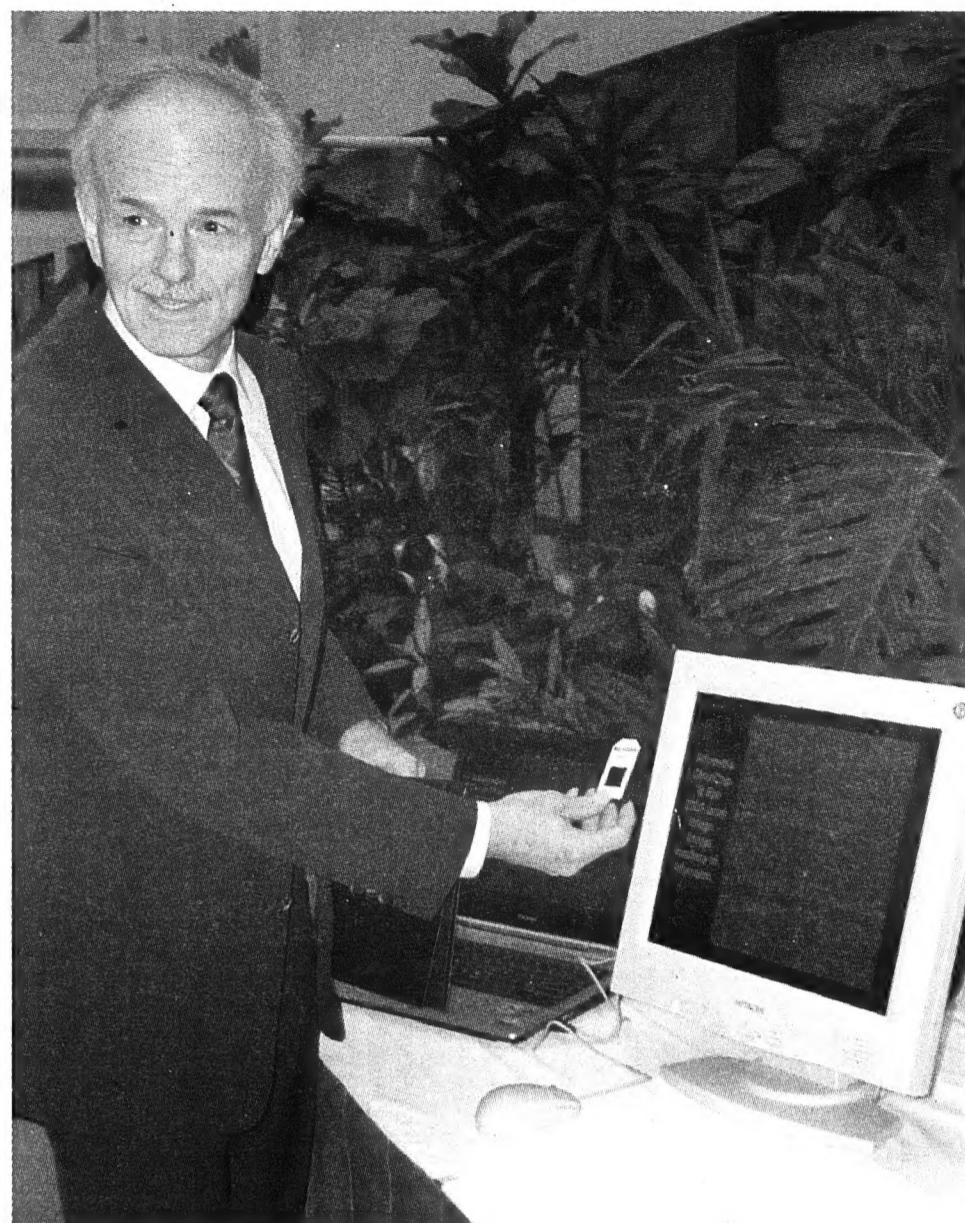
A second project, led by Dr. David Wishart of the U of A Department of Computing Science, involves metabolic profiling. By building a "metabolic toolbox", Wishart and his team want to use small molecules, known as metabolites, to detect changes in cell behaviour and organ function.

Ultimately, diseases, genetic disorders and patients struggling to recover from disease would be identified "100 times faster and 1,000 times cheaper than current methodologies," Wishart said.

Each of the projects has a three-year budget, and practical application is expected within about five years.

Genome Canada, which was established in 2000 by the federal government to support research into the study of human genes and proteins, announced 14 national projects which share \$123 million. The projects were chosen from a total of 45 submitted to Genome Canada's Applied Genomics and Proteomics Research in Human Health Competition.

The competition was launched last year as a result of the 2003 federal budget granting \$75 million to Genome Canada.



Dr. Philip Halloran says his microarray will revolutionize medicine.

Provincial and industry partners contribute the rest of the \$123 million. The focus is to support large-scale genomics and pro-

teomics research projects to improve the prediction, prevention and treatment of human disease. ■

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Province kicks in on research funds

Matching funds will help equip labs, recruit researchers and students

By Richard Cairney

Researchers at the University of Alberta have been awarded \$16.1 million from the Alberta Science and Research Investments Program (ASRIP) to help finance 11 research projects.

The funding, announced by Alberta Innovation and Science Minister Victor Doerksen, represents the provincial support, in matching grants, of federal funds earned through the Canada Foundation for Innovation.

"A number of these projects build on others that have been supported by ASRIP in the past, reflecting our commitment to investing strategically in research conducted in Alberta," said Doerksen. In all, ASRIP funding announced April 13 totals \$23 million to 17 research projects across the province.

One of the largest awards, \$4.6 million, was directed to the U of A's Centre of Excellence for Gastrointestinal Inflammation and Immunity Research.

The funding is one of several components financing a \$20.5-million initiative to create a world-class centre for research and treatment of gastrointestinal disorders. The centre will be located in the new Health and Research Innovation Facility, now under construction, and will be adjacent to both the Zeidler Family Gastrointestinal Health and Research Centre, a three-storey, 30,000-square-foot facility scheduled to open on the east side of University of Alberta Hospital next fall, and to the hospital itself.

"This funding will help purchase the equipment and initiate operation of

the basic research component," said Dr. Richard Fedorak, who will lead the new centre. "So if you put it all together it is bench to bedside in a true sense, in that we have basics, the test tube research going on in HRIF with state-of-the-art equipment and it carries all the way through to clinical patients in the Zeidler centre and all of it is adjacent to the Walter Mackenzie Centre. It will certainly be world class in that there is no other facility like it in the world. It will enable us to attract world-class scientists and clinicians to the U of A."

ASRIP also awarded \$4.8 million to Dr. David Lynch, dean of the Faculty of Engineering, towards equipping the Integrated Nanosystems Research Facility. The facility will focus on four areas: fabricating nanomaterials, the self-assembly and synthesis of molecules, nanoscale manipulation and the computing power to model, design and visualize nanosystems.

In biological sciences, Dr. Stan Boutin's Alberta Biodiversity Monitoring Program initiative was awarded \$600,000. The program is a university, industry, and government partnership to survey biodiversity and habitats throughout Alberta. The idea is that the program detects slow changes in biodiversity and relates those to changes to human activities so negative trends can be uncovered quickly and reversed.

The awards will also help fund Dr. Richard Stein's research into brain function. Stein and his team are researching ways to "strengthen residual connections" in the brain responsible for motion, among patients who have survived a stroke, spi-

nal cord injury or head injury. The funding, said Stein, will be used to purchase stimulating, recording and motion analysis equipment.

"It enables us to incorporate five young researchers into the HRIF building and it will provide labs and offices for them and their students, and will also allow the other nine researchers in the group to upgrade their equipment," he said. "It certainly opens up lots of possibilities."

The awards were welcome news at the U of A. "Alberta Innovation and Science, I'd have to say, came through in good fashion in partnering with these latest CFI Innovation Fund awards," said Bill McBlain, the university's senior associate vice-president (research). "The high-calibre research being supported arises from the creative imagination and talent of our faculty members and this example of federal-provincial partner funding is helping the U of A achieve its goals in teaching and research." ■

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Money - it's a hit. So sang Pink Floyd. Courts, consumers and the music industry are struggling with the effect new technology is having on bottom lines.

A musical free for all

File sharing is a blessing and a curse to the music industry

By Gilbert A. Bouchard

File sharing, file swapping, downloading: whatever you call it and whatever form it takes, snatching music electronically off of the Internet is here to stay. And it is a deeply divisive use of technology.

One thing is sure: whether you're building a music library from downloads culled from the collections of other music fans using file sharing programs or websites, or buying cuts from for-pay sites like Apple's iMusic or perusing new music found on promotional sites set up by artists and record labels themselves, electronic music distribution is a rapidly growing entertainment medium that can't be ignored.

The challenge is that music file swapping is more than just a purely technological or artistic issue. The practice has an impact on everything from intellectual property rights and the vitality of Canada's music industry to our core attitudes about the flow on information, and basic honesty, say U of A marketing and technology specialists.

"This is a new and efficient form of distribution that has the impact of cutting out the middle man and is here to stay," said U of A marketing professor Dr. Douglas Olsen, an academic with a research specialty in music and advertising.

"A lot of artists get paid very little for their CD sales and get paid more for air play, so you can see where they stand on this issue and why the music industry is nervous about downloads, especially in light of one study that showed that it (downloading) didn't hurt record sales in and of itself," said Olsen.

"It's certainly interesting from a marketing perspective, seeing how record companies will take this medium and make it work for them, especially given that they helped develop it and so many musicians

are OK with it. They certainly can't just stamp their feet and say it's wrong."

For Olsen, questions that must be addressed include the impact of downloading on the money that's available for album development ("it's expensive to make an album, \$50,000 to produce an album at the low end of the scale, and not difficult to spend more") and the larger issue of a societal confusion as to what intangible intellectual property rights are and the morality of taking something from someone despite their wishes.

"If it's advantageous to someone to download their music, more power to them, but for those that don't make it available it's troublesome. It's one thing to give away pens or pencils to sell more product, another thing to have people come over to your desk and take your pen. I'm profoundly disturbed that people aren't more disturbed by this issue."

Fellow marketing professor Dr. Adam Finn, who specializes in retailing and communications in the cultural industry, says file swapping is just a technological extension of older music-sharing technologies like cassette mix tapes, taking place at a different order of magnitude.

"I worked in the music industry in the 1970s before file sharing was a concern, and even back then they worried about people making tapes of albums or compiling singles to make tapes they liked to play at parties or give to their friends.

"There was a view that this was a significant factor in sales and over the years that led to some levies on tapes – in place in Canada as we speak – as a compensation of some recognized use of a media to store things collected in this way," he said, noting there's always been a debate over how much money is lost to the industry from

music freeloaders of various stripes, and whether these folks would be buying music at all if they had to pay for their tunes.

For Finn, contemplating the file swapping issue also means taking into consideration that music fans, pre-computers, enjoyed much of their music free of charge: listening to songs for free on the radio and then deciding to buy or not buy the "one or two" songs of the hundreds heard over the airwaves.

"Radio has always been seen as being in the best interest of the industry and musicians and some fees are paid for this 'free' music, but certainly not (from) the consumer," Finn said.

"You can certainly see how accessing music over the Internet is like listening to the music over the airwaves, and lots of bands and some small independent companies encourage downloads as a function of their business and marketing programs and as an alternative to traditional marketing. Getting new things heard is difficult and that's why record companies spend the money to get stations to play their music and why groups are happy to put their music on the Web."

According to Finn, the downturn in the recording industry as a whole reflected in world-wide drops in sales in recent years has much more to do with things like a two-decade-long trend of folks replacing their album backlog with CDs than file swapping.

Then there's the impact that the file swapping habit has on our intellectual hygiene, completely outside the realm of culture and the music industry.

Dr. Harvey Quamen – a Department of English professor who came over to literary studies from a career as a computer programmer and has a technological bent

to his humanities research – sees the lax attitudes towards intellectual property rights that fuels file swapping as "permeating everything" far beyond music file sharing.

"People feel that they have a right, are entitled even, to all kinds of information and that it should be free," he said, citing a widespread attitude that everything intellectual should be available seamlessly – and free.

"The Internet has had such a big impact over the 10 years I've been teaching, vis-a-vis accessibility. I now have to explain that I am only in my office for posted office hours and not there 24/7. I also have to underline to students that print culture has been around since 1450 and that only a small percent is available online."

It's important not to forget the even larger issue of cyber-literacy and its role in a larger intellectual climate, said Quamen, adding that, when he tells students in a class his notes are available online "they put down their pens" and stop writing. "I tell my students I can't post my PowerPoint slide shows on the Web because it's copyrighted – a lie – but my real strategy is to convince them they need to come to class and take notes when they are there."

Which raises the thorny question as to the link between cyber-file swapping and academic dishonesty.

"Academic dishonesty is a plague at the moment and getting harder to track, and I can't help but think that there is a parallel between the mentality that makes people feel they should have free access to music and movies and access to a free paper that they can turn in for a good mark." ■

If we don't give a hoot about spotted owls, what will move us?

One thing's for sure: politicians will react to endangered votes

By Dr. David Schindler, Karen Kraft Sloan, Rick Smith

You think you had a bad week? Be thankful that you're not an endangered plant or animal.

A British study released on March 18 showed that butterfly species in recent decades have declined 71 per cent, bird species declined 54 per cent, and plant species showed a decrease of 28 per cent. Scientists say the study is further proof that we are in the midst of an extinction crisis akin to the one that killed the dinosaurs 63 million years ago.

The last extinction phenomenon was likely caused by an asteroid hitting the Earth, but the current crisis is caused primarily by human activity that is destroying the places that endangered plants and animals need to survive.

Reversing the extinction trend will require a serious commitment from many sectors, but it cannot be done without government leadership.

How have our governments measured up to this challenge? In British Columbia recently, it was revealed that the provincial government secretly authorized wildlife officials to shoot a protected species, the majestic golden eagle, ostensibly in an effort to save the highly endangered Vancouver Island marmot. The scientists

on the marmot recovery team who are doggedly trying to save the species were not even made aware of the killings.

The primary threat for the marmot is not the eagle. Even if there were enough golden eagles to comprise a meaningful risk for the marmot, it would be minuscule compared to the threat caused by industrial activity in the marmot's habitat. Similarly, while the B.C. government admits that clear-cutting is leading to the extinction of the spotted owl, it has steadfastly refused to do anything about it.

The federal government's efforts to protect species have not been much better. After a long, bitter campaign by environmental groups, scientists and back-bench MPs, the Liberals finally passed a Species at Risk Act (SARA) in 2002. The law was supposed to come into effect last June, but Environment Minister David Anderson let government bureaucrats, who opposed the protections set out in the law when it was passed, delay implementation for an extra year.

Once the Act finally comes into force, it states that the places where a species feeds and rears its young will be protected. Feeding areas were specifically added to the law by MPs when the legislation was being passed, a move strongly resisted by

bureaucrats at the time. In a recent discussion paper, bureaucrats have decided they will thumb their nose at parliamentarians, and refuse to protect feeding areas, despite the law's inclusion of the term.

The law's protections for the habitat of endangered plants and animals apply only to species lucky enough to find themselves on the five per cent of Canada within federal jurisdiction – that is, national parks, defence lands and, yes, post offices. But animals tend not to know when they are stepping outside of federal land. And as soon as they do, the protections are no longer automatic.

The law does allow the federal government to step in when provincial laws are not adequately safeguarding a species, which should be good news for B.C.'s spotted owl. The owl is the most-endangered bird in Canada, having declined by 67 per cent between 1992 and 2002. Just 14 adult owls were recorded last year in B.C., the only province where it is found. B.C. has no endangered-species law, and the province is ignoring the advice of its own government scientists, who have recommended protecting the owl's habitat.

It's hard to think of a more compelling case for federal intervention than the

spotted owl. Yet Anderson has indicated that he doesn't want to use his authority to protect species. In response to a request to intervene to save the spotted owl earlier this month, he stated, "I don't think we want to test the Act for its muscle."

Without protection of its habitat, the spotted owl will be gone forever, as will hundreds of other species. They will join the Labrador duck, Dawson's caribou, and dozens of other species already quietly lost.

Anderson would prefer to wait before deciding what to do about Canada's endangered plants and animals. But the failure to act now to save species that are circling the drain is very much a "decision." It is an extinction decision, and one that both federal and provincial governments should be held accountable for. ■

(Dr. David Schindler is the Killam Memorial Professor of Ecology at the University of Alberta. He is a fellow of the Royal Society of Canada and was recently named to the Order of Canada. Karen Kraft Sloan is Liberal member of Parliament for York North and a former parliamentary secretary to the minister of the environment. Dr. Rick Smith is the executive director of Environmental Defence Canada. This article originally appeared in the March 26, 2004 edition of The Globe and Mail.)

Waste not, want not

Researchers invited to "play" at new waste management centres

By Richard Cairney

Dr. Jerry Leonard figures he's onto something big, and he wants to share it with his academic colleagues.

A professor in the Faculty of Agriculture, Forestry and Home Economics, Leonard is "on loan" as executive manager of the Edmonton Waste Management Centre of Excellence, overseeing what is internationally regarded as one of the most ambitious waste management projects in the world. With two brand-new buildings worth about \$4 million each, Leonard is hosting an open house in hopes that scientists can cook up new research ideas.

"The City of Edmonton is saying, 'Hey look guys, here is a sandbox – and it's full

of toys – come and play in it,'" said Leonard. "So I am interested in generating awareness among researchers about this opportunity."

"Traditionally this whole area of waste management has been seen to be the domain of environmental engineers, and a lot of good work has been done by the environmental engineering people at the U of A in collaboration with the city . . . we are interested in broadening that out a little bit and getting people in other disciplines interested in research in the whole spectrum. From fundamental to very applied, there is a host of opportunities in the waste management area."

The two new buildings, located at Clover Bar and Gold Bar, deal with solid

waste and wastewater.

The Centre of Excellence is a joint project of the city, the U of A, the Alberta Research Council, NAIT, Olds College, and the consulting firm Amec.

Leonard is holding two half-day sessions at Clover Bar and Gold Bar April 27.

"Basically it is an open house for university researchers. We have sent out some invitations, but we don't want people to think that just because they didn't get an invitation they aren't welcome – the more people we get out to these sites the merrier."

Anyone interested in attending the sessions should contact Emily Rowan at 492-3024 or via e-mail at emily.rowan@ualberta.ca. ■



Dr. Jerry Leonard

Scientist appointed to \$4.9-million research chair

Hong Zhang takes on oilsands challenge

By Julie Naylor

Dr. Hong Zhang understands the potential benefits that information and communications technology offers, and he is focused on demonstrating these benefits to Alberta's surface mining companies.

The University of Alberta professor's new appointment as an NSERC/iCORE Syncrude/Matrikon Industrial Research Chair in Intelligent Sensing Systems, valued at \$4.9 million over five years, will take him one step closer in doing so.

"There are several major challenges in oilsands mining, namely accurate measurement of the sizes of oil sand fragments, real-time monitoring of mining equipment, and analytical modelling of mining activities," said Zhang, a professor in computing science in the U of A Faculty of Science.

Finding effective solutions to these issues, he added, will allow Alberta's booming oilsands industry to optimize production by reducing rejects and increasing output, while at the same time lessening the environmental impact of oilsands mining.

"This is an exciting example of how Alberta's culture of innovation is helping improve our ability to tap a core resource in the most optimal way – for the workers involved, for the environment we cherish, and for the stakeholders in the company," said Victor Doerksen, Alberta Minister of Innovation and Science.

Most of the research activities, directly supported by Syncrude Canada and Matrikon, will be performed in the newly

created Centre for Intelligent Mining Systems (CIMS), a 100-square-foot facility in the U of A Department of Computing Science which is equipped with the necessary sensing, video and computing equipment.

Notable among the facilities is Dirt TV, which is a live video feed that can stream images from any one of 12 in-field cameras, carried on a dedicated fibre-optic link from Syncrude's North Mine to the CIMS laboratory.

Fibre optic and ATM communication networks bring data and live video information from the pit floors in Fort McMurray mines to the laboratories in Edmonton, 500 km. away.

Here, Zhang and his research team

will analyse oil sand fragments to develop accurate measurement of their sizes so that mining operations can be made more efficient and produce less waste. In addition, the remote monitoring of equipment will identify problems before they occur, such as missing shovel teeth, which can break and drop into the crushers, causing major problems and production delays that cost millions of dollars.

This type of partnership is key for industry, said Dr. Ron Kube, a research associate with Syncrude and co-director of CIMS. "By examining both fundamental and practical issues relevant to surface oil sand mining in the lab, we can develop necessary solutions which can be transferred to industry." ■

The importance of being idle

Mountain diaries chronicle Canadian alpine history and a life well-lived

By Richard Cairney

It happens all the time. You're introduced to someone and even if their occupation isn't mentioned, the subject always comes up: 'So, what do you do for a living?' The question reveals just how much we wrap our identities in work, as opposed to what we do with our free time. After all, so few of us are astronauts or rock stars or anything really interesting, right?

Wrong. A new book by Dr. Karen Fox and Dr. PearlAnn Reichwein of the Faculty of Physical Education and Recreation paints a portrait of a Canadian who was exceptional because she was ordinary, but extraordinary in that she lived her life well.

Mountain Diaries: The Alpine Adventures of Margaret Fleming, 1929 - 1980, researched and edited by Reichwein and Fox, chronicles the mountain adventures of Winnipeg school teacher and adventurer Margaret Fleming. In telling Fleming's story, the book is a teaching and research tool as well as an engaging read. Published by the Historical Society of Alberta, the book paints an historic landscape of alpine climbing in the Canadian Rockies, the history of Canada's mountain parks and the tourism industry that grew around the two.

Fox, who teaches leisure studies, first met Fleming in Winnipeg in 1990, when Fox was teaching at the University of Manitoba. "I'd heard there was a woman in town who had climbed during the 1920s and I'd always wanted to write the story of a woman's leisure, to tell a woman's story around leisure," said Fox, who ultimately became close friends with Fleming, who passed away in 1999.

A Scottish immigrant and daughter of a Presbyterian minister, Fleming grew up in Winnipeg and earned university scholarships in math and philosophy. Demonstrating her pragmatism, she enrolled in education at the University of Manitoba, dropping math because it was an unconventional area for a woman to study.

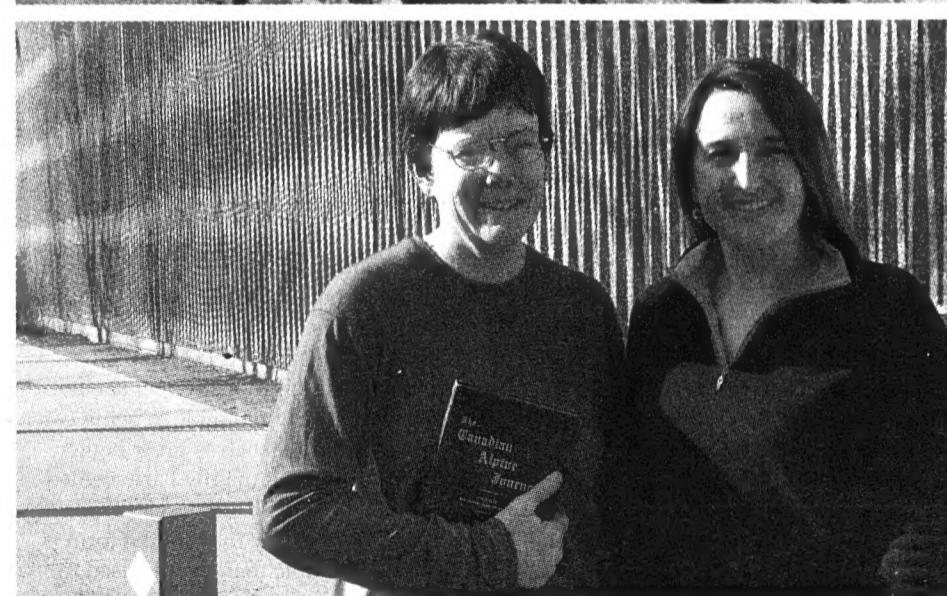
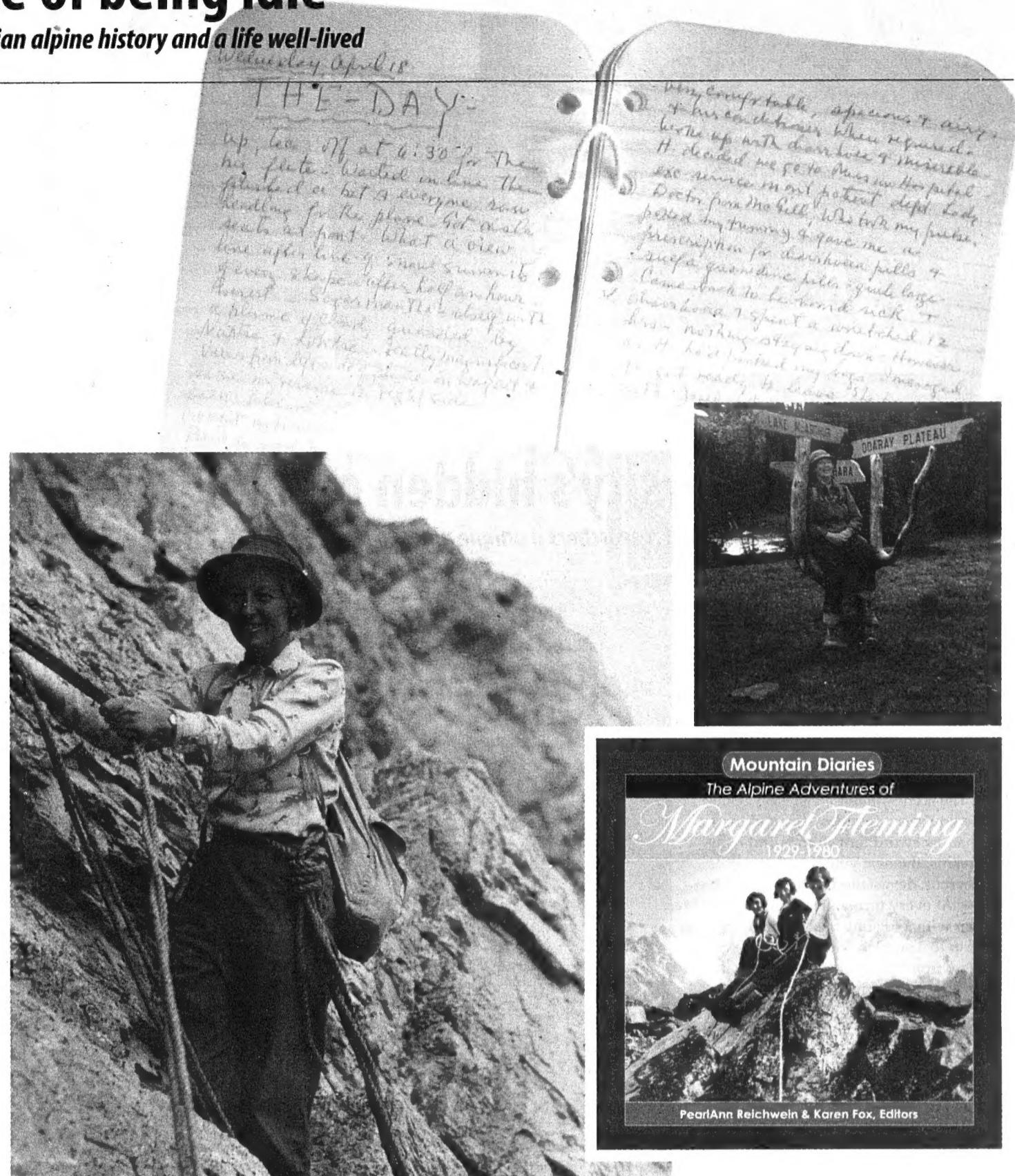
But Fleming was anything but conventional. In an era when women were expected to marry and have children, she bucked the system, entering the teaching profession as "a means to an end", Reichwein and Fox say in the book's introduction.

"We understand that she thought marriage and child-rearing was rather dull," said Reichwein, who researches the cultural and environmental history of Canada's national mountain parks and teaches the history of leisure, sport, parks and travel. "She had a kind of independence that allowed her to be free, and climb, and go on holidays. She had a career that allowed her to take summer holidays . . . our cultural approach to our time and our work in some ways precludes our leisure time whereas Margaret Fleming took an approach that prioritized leisure time. When you read the story of Margaret Fleming, it opens a window to look at daily life in a different way."

It also introduces readers to a wonderful character in Margaret Fleming. For Fox, researching the book meant, literally, reading the diaries of a dead friend. The work brought up poignant moments and new insights to her old friend. In diaries written after Margaret's sister and long-time travel companion Hilda passed away, Fox says she could read between the lines of Fleming's handwritten diaries that Hilda's death was not far from her mind.

"I could see Margaret struggling through her grief over the loss of her sister," said Fox, who studies the connections between women, nature and leisure. "She doesn't say it there but I was halfway through this and said 'Hilda has died - her sister has died'.

"It is the first time in her diaries that she focuses somewhat on herself . . . it seems a little less adventuresome or a little more sad, or attentive to some kind of loss.



The mountain adventures of Margaret Fleming bring history to life, thanks to the work of Dr. Karen Fox and Dr. PearlAnn Reichwein.

I mean, here is a woman who, at 72, flies off to India (with her sister Hilda) so they can go and see Everest. So what you get in the 1979 journal - Margaret seems, well - it's more like a journal. By 1980 you can see she is showing a little more resilience."

For Reichwein, researching the book meant getting to know Fleming. "You read all of these handwritten notes and you have to develop a kind of sensitivity for the person, for the way she held her pencil, the way she formed her letters, so you can understand what she is saying," Reichwein said.

"It's almost as if you get to know the person: she liked desserts. She really likes apricots - all her life, she likes apricots. She drinks scotch. And she likes fresh cherries."

But Fleming was, Reichwein points out,

someone who sat on the sidelines casually observing. She served as the first female editor of the Canadian Alpine Journal from 1942 to 1952 but she was rarely named in it. Reichwein and Fox would find pictures of Fleming, unidentified, in the Journal. The two realized, Reichwein said, that once they began looking for Fleming - they could pick out her clothing and hairstyle in photos - you could find her "woven into the story of the Alpine Club."

She was a part of a greater mountaineering community as well and although she was a naturally skilled climber - she completed 10 climbs including the classic Kain Route on Mt. Louis in Banff, during her first Alpine Club of Canada summer camp in 1929 - Fleming wasn't competitive

or interested in conquest.

Instead, Reichwein says, Fleming often wrote of her time on expeditions away from the leaders, "loafing, lagging and loitering." Fleming wrote in small, pocket-sized note books along trails, beside brooks, atop mountains or in meadows.

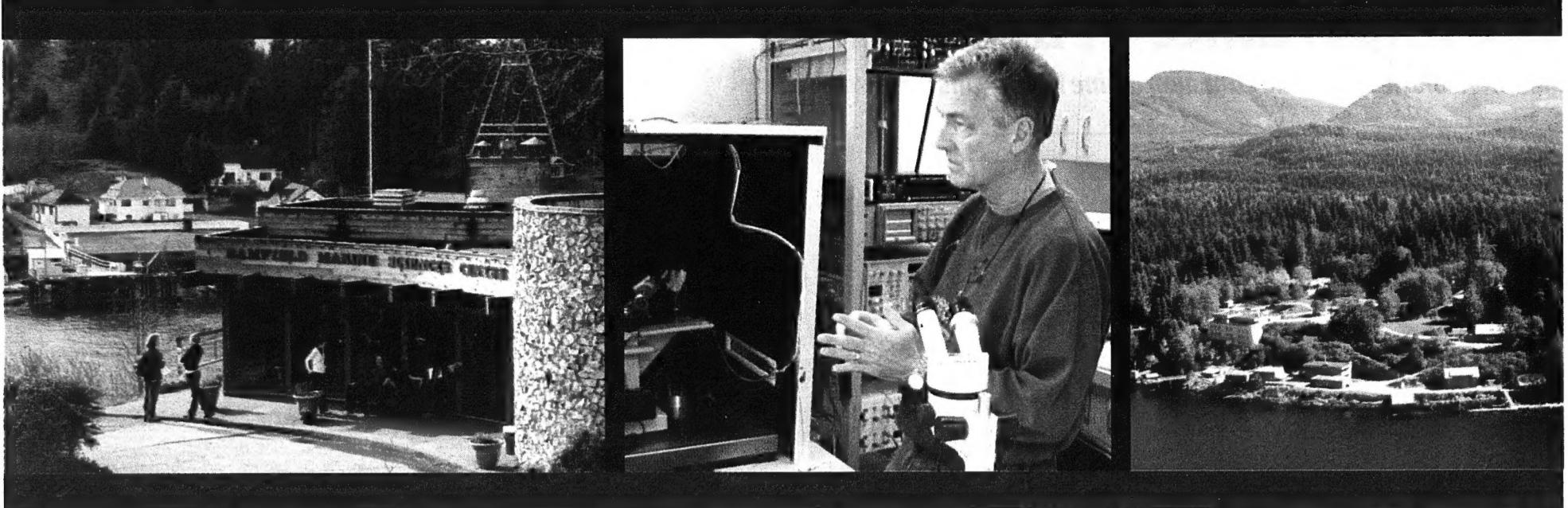
"When you travel, it opens up an opportunity for contemplation and writing. You have to have that idle time to open up and one of the themes of her work is the importance and beauty of idleness. She spent a lot of her time bathing in streams, basking in the sun and napping on mountaintops. She enjoys the soft side of adventure and had a sense of deep immersion and dwelling in the land. She has this real sense of contact and companionship with the landscape and enjoys and indulges herself in every sense."

While relaxing on "alpine time," the researchers say, Fleming sought "a loiterer's paradise".

But Fox and Reichwein are careful not to make Fox into something she was not. Beyond enjoying the outdoors and making leisure time a priority, she was no different than anyone else.

"Margaret was not necessarily unique, unusual or exceptional, in that she was a high school teacher; she took care of her parents. She can't claim to have been the first woman to have climbed Everest. But she lived her life well and not many people have lives well-lived," Fox said.

"In a quiet and unassuming way she managed that journal for 10 years and played a part on the world scene nonetheless. She was seeking to be honoured for a job well done and that was the end of it." ■



A prairie university's hidden coastal gem

Bamfield centre offers students and researchers a unique place to learn

By Sarah Boon

A trip to the Bamfield Marine Science Centre (BMSC), on the west coast of Vancouver Island in remote Barkley Sound, is an expedition in itself. Although it's just 225 km from Victoria, the drive takes four hours. Half of that time is spent on gravel logging roads that buck and spin like a rodeo bull. Their true depth hidden by muddy rainwater, potholes litter the route. The scenery alternates wildly. One minute you're among moss-covered trees that shadow sword fern clumps and rushing streams, the next you're in the middle of a clearcut, devastation as far as the eye can see. At every turn you expect to come head-on with a logging truck, bringing your trip to a sudden and unfortunate end. The view from the centre, however, makes the white-knuckle trip worthwhile.

Bounded on either side by Pacific Rim National Park, the area offers a pristine marine environment in which to conduct research. "It's an extremely diverse environment," said Dr. Andy Spencer. "It's located at the boundary of northern and southern fauna, so we see species from both ranges in the ocean around the centre." The site also boasts the only cedar canopy platform in Canada, located on an untouched peninsula adjacent to the main research complex.

As a faculty member in Biological Sciences at the University of Alberta, Spencer has the ideal job. For the past decade he's been the director of the BMSC. The position comes complete with a beautiful house and a breathtaking view, and the opportunity to live year-round at a centre that has mentored and trained a generation of marine science researchers. Graduates of BMSC programs can be found at the Vancouver Aquarium, and in government and academic positions across Canada.

The job can get hectic, however, which is why he's stepping down this spring. "It's like running a university in miniature, but without all the support staff," said Spencer, who teaches and conducts research while also administrating the centre, raising funds, and organizing capital projects. His research, funded by the Natural Sciences and Engineering Research Council and the Canadian Institutes of Health Research, examines how stem cells in early animals such as jellyfish, flatworms, and sea squirts develop into a variety of nerve cells in adults, with different electrical properties and firing patterns. This could help researchers understand what causes nervous system diseases in the developmental stages.

Dr. Sally Leys, also from Biological Sciences, worked at BMSC during her doctorate at the University of Victoria. Now funded by NSERC and Alberta Ingenuity, Leys also studies nervous systems. She spends her time at BMSC examining glass sponges, which have no nervous or



Researchers at the Bamfield Marine Science Centre lower a submersible remote observation vehicle into the waters of Barkley Sound, above. Top photos: The main entrance to BMSC, Dr. Andy Spencer at work in his lab, and an aerial view of the centre.

muscular systems. She tries to figure out exactly how they can sense that something is touching them, and then contract from that touch, without nerves or muscles, thus helping to understand how other animals developed more advanced muscular and nervous systems.

"Glass sponges live in deep water," she said. "And the only laboratory tanks where they'll survive are at BMSC, because the water comes from about the same depth (30 m). I have to use this system to do any sort of controlled experiments."

Dr. Donald Ross, Dean of Science at the University of Alberta from 1964-1976, played a major role in establishing the centre. In 1972, the University of Alberta, the University of British Columbia, the University of Calgary, Simon Fraser University and the University of Victoria joined forces to jointly fund BMSC. It was started mainly as a training ground for young marine and coastal ecosystem scientists, emphasizing hands-on lab and field-work over lectures.

"It's a great place for graduate students to start their projects," said Leys. "It offers a superb support network, seminars all summer, and the sea at their fingertips." BMSC has since evolved to provide year-round research support for university and government scientists from across Canada and the United States, and also offers public education programs to interested schools and groups, maintaining strong connections with the community and the local First Nations band. BMSC is now one of the few largely self-sufficient research

stations in Canada, raising 60 per cent of its budget from user fees and grants, and receiving only 40 per cent from the member universities.

Dr. Rich Palmer, also in Biological Sciences at the U of A, uses BMSC for three to four months each year. "I study how the marine environment makes animals change their bodies," he explained. "For example, when snails are exposed to the smell of crabs they tend to grow stronger shells, making them less vulnerable to being eaten by crabs. Crabs themselves grow bigger claws when they eat mainly hard-shelled foods, compared with soft foods. These types of studies show that animal form is a lot more dynamic than people used to think."

Resources available to researchers through BMSC are phenomenal, and include wet and dry labs, a library, two boats, a full diving set up with on-site compressor, a submersible remote observation vehicle (ROV), a variety of holding tanks, a newly constructed flume, or channel, several high-tech microscopes and other lab equipment. "I use the ROV to study and collect animals in the fjords around Barkley Sound, and bring them back to BMSC to carry out lab work," said Leys. The high-quality seawater space for holding and studying animals "is most important," added Palmer.

The facility is one thing, but working with marine scientists from across Canada also has its benefits.

"All researchers like to interact with other groups, and learn from and help

"Researchers can come here and all the facilities are ready for them. They don't have to worry about meals, their family, or other duties – they can focus on their research. It can be an intense and productive place."

— Dr. Andy Spencer

each other," said Leys. "It makes students more aware of different people working in marine science at the western Canadian universities." Palmer agrees, saying the research atmosphere is "wonderful" and leads to increased collaboration.

Spencer describes BMSC as a science hotel.

"Researchers can come here and all the facilities are ready for them. They don't have to worry about meals, their family, or other duties – they can focus on their research. It can be an intense and productive place."

While the ability to use BMSC was a major part of both Leys' and Palmer's decisions to accept positions at the U of A, Leys does think there are things that could be improved.

"I'd like to see equipment in top condition, and access 24 hours a day," she said. "A 10-day on/four-day off shift for some of the research staff might help solve problems during the summer research season, while the recently opened labs should reduce some of the pressure for the better lab spaces."

Spencer admits much of the original infrastructure is starting to show its age, but recent building projects (new dormitories, a new conference and lab facility, and a plan for new researcher cabins) are expected to deal with those issues.

The weather on the wild west coast of the island can also be something to contend with. "I've been in a 14-foot boat in the middle of 20 to 25-foot breaking waves," said Palmer.

Spencer shows off the backup generators: one large and three small ones. "The power goes out fairly regularly in winter," he said. "These generators start up right away and keep everything running."

In the end, though, being at BMSC has its own rewards. "I enjoy seeing students get excited about their individual projects, and seeing the influence BMSC has on students and their careers," said Spencer.

"The setting is spectacular," added Palmer. Leys agrees: "It's good to get a change during the year. BMSC is a beautiful location, and though it's work, work, work when there, it's a lovely place to do it in." ■



Nelson Lazon

Dr. Sally Leys, seen here with a sponge, says there is much to be learned from the deep-sea creatures and wants to see steps taken to protect their habitat.

Rare glass sponge reefs at risk, says researcher

Marine biologist fears industry effect on "Amazon rainforest of the sea"

By Ryan Smith

With politicians talking about ending a moratorium on oil and gas mining exploration off the coast of Queen Charlotte Sound in British Columbia, a University of Alberta professor is concerned about the fate of a rare treasure unique to the area.

There are four glass sponge reefs in Hecate Strait in Queen Charlotte Sound and possibly another two in nearby Georgia Strait. "They are one-of-a-kind in the world," said Dr. Sally Leys, a professor in the U of A Department of Biological Sciences.

Glass sponges generally exist in deep, cold parts of the Pacific and Antarctic Oceans, but the continental shelf off of the B.C. coast provides the unique environment that allows them to form vast reefs in water only 150 to 200 metres deep. The discovery of the reefs there about 15 years ago astounded scientists, Leys said.

"Nepal has Mount Everest, and we happen to have a continental shelf that is amenable to creating these reef structures," she said.

Estimated to be more than 9,000 years old and spanning more than 700 square kilometres, the reefs have been called the Amazon rainforest of the sea. Members of the Canadian Parks and Wilderness Society have been pressing Canadian officials to include the reefs in Canada's shortlist of proposed World Heritage Sites.

However, Prime Minister Paul Martin recently said he is "open-minded" about changing legislation that would allow for mining exploration of oil and gas in and around Queen Charlotte Sound.

And the biggest threat to the reefs now is bottom trawling, which refers to scraping the bottom of the ocean for seafood. Bottom trawls break up and kill the sponges they run over. Currently, there is no legislation in place to prevent bottom trawling over the reefs, but fishermen in the area have made a "verbal promise" to B.C. government officials, vowing that they will not bottom trawl in the area, Leys said.

However, Leys said there is evidence trawling has already destroyed some parts of the reefs, and she added that valuable fish such as orange roughy, seabass and cod are known to inhabit the reefs.

"Clearly, the reward is quite good for (trawlers), and the reefs are vulnerable in spite of the verbal promises," she said.

Glass sponges are extremely sensitive

"They are one-of-a-kind in the world. Nepal has Mount Everest, and we happen to have a continental shelf that is amenable to creating these reef structures."

— Dr. Sally Leys

animals, Leys noted. They will suspend their own intake of water, their feeding process, whenever they are touched or there is too much sediment in the water.

Parts of Howe Sound, just north of Vancouver, are a "glass sponge graveyard," Leys said. Three large industries, including a copper mine and two pulp and paper mills, were active in the area before the sponges died, Leys said.

It's not known whether these industries played a role in killing the sponges, or whether Howe Sound was hit by one of a series of natural low-oxygen events, but it appears that human activities can be damaging to the sponges, she added.

Aside from being physical marvels, sponge reefs, like coral reefs, foster biodiversity. "They act like a copse of trees," Leys said. "They provide shelter to a wide range of organisms, just like trees do in the forest."

But Leys, one of only a few glass sponge experts in the world, believes the real value of the creature is that it has survived since prehistoric times, and has a rapid co-ordination system that can help answer questions about the origins of our own nervous system.

"Glass sponge reefs are descendants of the first multi-cellular animals on earth," Leys said. "They maintain the roots of many of our own systems, and we can learn a lot by understanding them better."

Leys is able to study the marine animals while residing in the middle of the Canadian prairies thanks to the U of A's partnership in the Bamfield Marine Sciences Centre on Vancouver Island.

"I spend two to three months of the year in Bamfield," she said. "The U of A has a large presence there, and marine researchers here are well served." ■

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Re-Mambo to leave your name

Linda Prud'homme's hobby becomes a passion

By Cynthia Strawson

Linda and David Prud'homme's answering machine is arguably the most rhythmic in Edmonton.

"David and Linda are climbing the waltz and can't cha cha chat. When you hear the beep that follows, take the lead, and re-mambo to leave your name, number and a message. Samba-de will polka the numbers to catch up on all that jive. A-rumba-derci."

The message, heavily laden with dance innuendo is appropriate for some of the city's most active dancers and dance instructors. With 29 years of service to the U of A (Linda joined the Registrar's Office in 1975 and is now the assistant dean in the Faculty of Agriculture, Forestry, and Home Economics), Prud'homme and her high school sweetheart have torn up dance floors across Edmonton, taking and giving Latin and ballroom dance lessons for 21 years.

"We signed up for ballroom dance lessons in 1983," said Linda. "And this is more fun than I ever thought it would be 21 years ago."

After attending many student functions through work and watching the students who "looked like they were having so much fun" Linda and David decided they would take ballroom lessons. After the first lesson, they were hooked. "We took both level one and level two of ballroom and Latin lessons twice. We wanted to make sure we had clean footwork."

Clean footwork proved to be the basis for decades of dancing passion. "We still take dance lessons," said Linda, whose rep-

ertoire has expanded to include Polynesian and belly dancing. "It's a great stress buster and energizer. We usually dance at least two or three evenings per week." And that doesn't include practice.

"But we love to teach. You really get to help people more and that's what I enjoy," said Linda. "A lot of dancing is just walking with some style to it. We try to keep things light while we teach. It helps keep people relaxed and comfortable."

Their teaching includes classes in basic ballroom and Latin dances through Edmonton's Metro Community College, Everyone's Ballroom Dance Association, Edmonton Japanese Cultural Association and a variety of community leagues. They even started their own company, David and Linda Dance, in 1990, and began helping engaged couples prepare for their wedding's first dance.

Linda said the couple has a dance studio in their basement to accommodate the private lessons. "They bring their song and we teach them how to dance to it," she said. There's more to the first dance than just music. Most brides also need to learn how to dance while wearing a billowing dress. "I encourage brides to bring in their crinoline so they'll wear it over their jeans to get used to the feel of moving around in it."

The Prud'hommes even brought their teaching to campus as part of a demonstration of the Social Psychology of Clothing for former Human Ecology professor Jill Oakes. "We danced in our dance costumes," said Linda. "Then we did the same



Friends of Linda and David Prud'homme joke that the couple didn't buy a house, they bought a dance studio with a house built around it. The couple, seen here doing a tango in their home dance studio, took their first dance lesson in 1983, and haven't stopped dancing since.

dance with jeans and then again with me wearing a tight skirt. That way the students could see what a difference the clothing made to the feel of the dance."

Reflecting on her favourite dance teaching story, Linda recalled a couple that came to them for lessons in 1990. "It seemed like they spent quite a bit of time arguing during classes," said Linda, clearly moved

by the memory. "But at the end of the six weeks they came to us and said 'thanks, you saved our marriage.'"

Dance is "like a conversation," she said. "David leads and I respond. It's never the same twice. The music tells you what to do and we respond to it."

Their conversation shows no signs of slowing down. ■

Tiny tick may solve a big problem, research shows

Vaccine could help solve \$10-billion problem

By Phoebe Dey

A certain species of tick has discovered the secret to staying slim - by remaining virgins. Female ticks that mate will drink 100 times their weight in host blood, whereas virgins aren't so gluttonous, says a University of Alberta researcher who has discovered a protein that may offer clues to a \$10 billion U.S. global tick problem.

"What happens is that a female will remain attached to a host, eating slowly and waiting to be fertilized," said Dr. Reuben Kaufman, of the U of A's Faculty of Science. "If she does copulate, the seminal fluid contains an engorgement factor protein which acts as a signal to tell her to complete engorgement. Within 24 hours of copulation she will

increase another 10 times her unfed weight."

Female ticks require six to 10 days to engorge fully. The feeding cycle consists of three phases: a preparatory phase when she attaches herself to the skin; a slow phase, during which the female feeds to 10 times her unfed weight and the third phase after copulation when the female increases her weight a further tenfold. The virgin tick, however, rarely exceeds the critical weight necessary for laying some eggs.

Kaufman and Brian Weiss, who was a doctoral student in the U of A Department of Biological Sciences at the time of this research, produced a protein, recAhEF, from feeding-induced genes in the male

gonad of the African cattle tick. This research is published in the latest issue of the *Proceedings of the National Academy of Sciences* journal. By injecting that protein, called voraxin, into virgin ticks researchers could stimulate the tick to grow to full engorgement. Armed with that knowledge, the researchers then immunized a rabbit against voraxin and found that about 75 per cent of ticks preying on the animal failed to feed beyond the critical weight, whereas mated ticks feeding on an unvaccinated rabbit engorged fully.

"We want to use these proteins as a basis of a vaccine," said Kaufman, who has filed a patent for his discovery. "If we

can vaccinate cattle against this protein, then they would be significantly protected against ticks. Not only would it control the tick problem, which is about \$10 billion problem globally, but it would inhibit the disease ticks transfer as well."

"Ticks affect the growth of calves and they affect milk production, even with minor infestations."

Currently, the major control mechanism used to treat ticks is pesticides, which often come with ecological problems and may affect the meat, said Kaufman.

Kaufman's research was funded by a Natural Sciences and Engineering Research Council of Canada (NSERC) grant. ■

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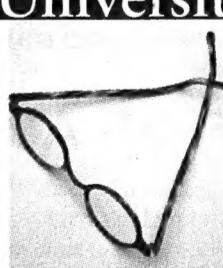
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APR 16

Molecular Biology and Genetics

Group Seminars Alexandre Stewart from the Cardiovascular Institute of the University of Pittsburgh will be presenting a seminar on "Tissue-specific gene expression regulated by an ubiquitous transcription factor". Location: M 145 Biological Sciences. 3:30 p.m.

iHuman Hip Hop Performance: The Surviving Spirit Join us for an evening of live hip-hop, as six women from iHuman's inner city art studio perform their own original music about the struggles of life and the survival of the spirit. Location: Milner Library Theatre, Stanley Milner Library (7 Sir Winston Churchill Square). 7:30 p.m. to 8:30 p.m.

APR 16 – APR 28

Fine Arts Program, Faculty of Extension -

Wendy Rao Wendy Rao - Face to Face. A final visual presentation for the Certificate of Fine Arts, Faculty of Extension. Opening reception is on Friday, April 16, 2004, 6-9 p.m. Wendy's art uses colour and mixed materials to explore the harmonies and contrasts of human interaction. Location: Extension Centre Gallery, 2nd Floor, 8303-112 Street, Edmonton.

APR 19 – APR 21

Distinguished Scholar Lecture Series A series of three lectures on the "Sensory Basis of Sexual Selection," presented by Dr Michael Ryan, Clark Hubbs Regents Professor, Section of Integrative Biology, School of Biological Sciences, University of Texas at Austin. Location: CW410 BioSci on April 19 & 20, M149 BioSci on April 21. 3:30 p.m. to 5 p.m.

APR 19

Jones Memorial Lecture in Deafness Jones Memorial Lecture in Deafness "Predictors of Successful Outcomes for Children with Significant Hearing Loss" by Dr. Christine Yoshinaga-Itano, Head of Audiology, Dept of Speech, Language and Hearing Sciences, University of Colorado. This lecture will present data that led to the support for establishing early hearing detection and intervention programs begun through universal newborn hearing screening programs in the United States. This is a free public lecture and ASL Interpretation and Real-time captioning will be provided. Location: 2-115 Education North, Education Building, University of Alberta Campus. 7 p.m.

Screening of NFB's "Faithful Women Vol. 3" and "Behind the Veil: Nuns" 7 p.m. "Faithful Women Vol. 3" 9 p.m. - "Behind the Veil" "Faithful Women, Volume 3" shows the problems of discussing topics at an interfaith conference and explores media stereotypes. "Behind the Veil" documents the turbulent history and remarkable achievements of women in religion. Visit: www.metrocinema.org. Location: Metro Cinema, Citadel Theatre (9828 - 101A Ave.) 7 p.m.

APR 20

Department of Public Health Sciences Genes and Environment in Human Health: The Need for Balance. Department of Public Health Sciences - Dr. John Frank, Scientific Director of the CIHR Institute of Population and Public Health will give the Douglas R Wilson Lecture in Population Health. He will speak on Genes and Environment in Human Health: The Need for Balance. Location 2-117 Clinical Sciences Building. 5 to 6 p.m.

APR 21

PHS Grand Rounds Dr George Goldsand, Professor Emeritus, Division of Studies in Medical Education "Social Accountability - Can it be Measured at the Bedside?" Location: Room 2-117, Clinical Sciences Building. 12 to 1 p.m.

Edmonton Regional Alumni Reception for Mechanical Engineers Join other Edmonton-area U of A Mechanical Engineering graduates for an evening of renewing old acquaintances, meeting new friends, and celebrating the Faculty's successes. Please phone: Rochelle Marshall at 780-492-7050 or 1-800-407-8354. www.sme.org Location: Faculty Club. 7 - 9 p.m.

APR 22

The Contributions of Religious Traditions to Civil Society A tri-faith (Muslim, Christian and Jewish) dialogue open to all members of the community. The day-long event will feature presentations, panel discussions and break-out groups. Registration is \$30 (\$15 for students). For information or to obtain a registration form, contact the Interfaith Centre at 413-6159. Location: University Conference Centre (Lister Hall). 8 a.m. - 6 p.m.

APR 23

The Centre for Research on Literacy What

Counts: Education Knowledge Management Practices. Dr. Victor Glickman Director, Edudata Canada Vice President, Canadian Educational Research Association Chair, Network of Centres and Institutes in Education, UBC Please RSVP to Cherie Geering at cgeering@ualberta.ca. Lunch will be provided. Location: 651a Education South. 12:30 - 2 p.m.

Molecular Biology and Genetics Group Seminars Steve Finnell of the University of Southern California will be presenting a seminar. Location: Biological Sciences M 149. 3:30 p.m.

Screening of "The Magdalene Sisters" Set in 1960s Ireland, Peter Mullen's drama explores the personal struggle of inmates of the Magdalene Sisters' Asylum. The screening will be prefaced by an introduction from the Reverend Dr. Eileen Conway. Location: SUB Stage (Student's Union Building, U of A campus, 114 St & 89 Ave.). 7:30 p.m.

APR 24 2004

Victoria Branch Event Annual Alumni Brunch Guest Speaker: Dr. Ian Morrison, Dean of the Faculty of Agriculture, Forestry and Home Economics Contact: Darcy Verschoor darcy.verschoor@rbc.com Register on-line! Location: Hotel Grand Pacific.

Philosopher's Cafe Title - Running Like A Girl: Media Coverage Of Women In Canadian Politics Guest Scholar: Dr. Linda Trimble, Professor, Political Science Moderator: Dr. Bruce Hunter, Assoc Prof & Chair, Philosophy. The Philosophers' Café program is an opportunity offered to the public to drop-in and participate in stimulating conversation about a topical or philosophical issue. Admission is free, although participants are expected to purchase food and/or beverages. Location: Nina's Restaurant, 10139 - 124 Street, Edmonton. 2 p.m. to 3:30 p.m.

APR 26

A-Link Web Resource Launch Web site launch. The Legal Studies Program, Faculty of Extension, University of Alberta, recently undertook a collaborative project with Alberta Justice to create an online directory of public legal education and information organizations in Alberta. The directory will serve as a referral point to other law-related resources, sources, and services in the province. Location: Dining Room - TELUS Centre for Professional Development. 11:45 a.m. to 1 p.m.

Mechanical Engineering Mechanical Engineering Seminar. Carbon emission trading and its influence on power industries. Prabir Basu, Mechanical Engineering, Dalhousie University. Location: E 2-3 Mechanical Engineering. 2:15 p.m. to 3:30 p.m.

APR 28

PHS Grand Rounds Guest Speaker: Dr Paul A Demers, Associate Professor, UBC School of Occupational and Environmental Hygiene, Vancouver, BC "Recent Results from the BC Sawmill Cohort Study." Location: Room 2-117, Clinical Sciences Building. 12 p.m. to 1 p.m.

Hear's to your Health Concert Series

Department of Music, Faculty of Arts. Hear's to your Health Concert Series. Guest artist Marina Hoover, former cellist of the St. Lawrence String Quartet, will be joined by ESO concertmaster Martin Riseley and U of A faculty member Patricia Tao, in a chamber music concert at 5 p.m., in the first floor foyer to Bernard Snell Auditorium, Walter Mackenzie Health Sciences Centre, 112 Street entrance. The program will include the Barber Sonata for cello and piano and Beethoven "Archduke" Trio, op. 97. Admission is free and open to the public. For more information contact: Gladys Odegaard, 487-4188, gladysco@shaw.ca.

APR 29

Department of Medicine's 2004 Research Dan and E. Garner King Lecture The Department of Medicine will hold the 2004 Research Day (Residents, Graduate Students and Post Doctoral Fellows) on Thursday, April 29, in the Tiered Classroom at the TELUS Centre. Special guest adjudicator will be Dr Janet Rossant from The Samuel Lunenfeld Research Institute at Mount Sinai Hospital in Toronto. Dr Rossant will present the E. Garner King Memorial Lecture at 5 p.m. in Classroom D, WMC. A reception will follow where Research Day prizes will be awarded. Research Day oral presentations will take place from 8:00 - 4:00.

Posters will be on display in the TELUS Centre Foyer with adjudication taking place between 11:00 and 1:00. Lunch will be available and all are welcome to attend. For further information please call 407-3131. Location: TELUS Centre. 8 a.m. to 6 p.m.

APR 30

Sing Along "Sound of Music" An evening of movie magic! Enjoy a film known for portraying an



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Faculty of Science Award for Excellent Teaching

Dr. Edward Lozowski

Department of Earth & Atmospheric Sciences

Dr. Edward Lozowski joined the University of Alberta in 1971, after obtaining his BSc (Physics and Astronomy), MSc (Physics), and PhD (Physics) from the University of Toronto. He is the leading international expert on all aspects of ice accretion, a costly and deadly natural hazard that includes hail and icing of aircraft, power network equipment, and marine vessels and structures. His contributions to the field include significant innovations in the measurement, understanding, and modeling of this phenomenon. His goal has been to develop design and operational strategies to mitigate the risks and effects of ice accretion, thereby reducing its substantial economic losses, and contributing to the safety and security of Canadians. Ed is the recipient of numerous awards and honours, including the FW (Casey) Baldwin Medal from the Canadian Aeronautics and Space Institute in 2002, the Patterson Medal from the Meteorological Service of Canada in 2001, and the Andrew Thompson Prize in Applied Meteorology from the Canadian Meteorological and Oceanographic Society in May 2000.

Dr. Lozowski has taught a variety of courses at both the graduate and undergraduate levels, including courses integral to the B.Sc. Specialization and Honors programs in Atmospheric Sciences such as Atmospheric Physics, Atmospheric Fluid Dynamics, and Physical Climatology. He has also taught courses to nonspecialists, including the Violent Weather course (EAS 202), which fills the largest lecture theatre on campus every year.

He has served the scientific community in numerous capacities. Particularly notable are his service as President of the Canadian Meteorological and Oceanographic Society, as Editor of the journals Atmosphere-Ocean and Atmospheric Research and Chair of the Grant Review Committee of the Canadian Foundation for Climate and Atmospheric Sciences. He has published more than 150 papers in refereed journals and proceedings.

Dr. Ted Lewis

Department of Mathematical & Statistical Sciences

Dr. Ted Lewis joined the Department of Mathematical and Statistical Sciences as a full-time continuing member in 1975. During his long tenure, he has been a most important faculty member in terms of teaching, because of his innovative ideas and immense versatility. On the one hand, he has built up a number of very successful courses. On the other hand, he is our proverbial trouble-shooter. Whenever a crisis in teaching develops, it is to Dr. Lewis that the department turns for a solution.

In the past few years, Dr. Lewis has really made an impact with what he did in our Math 160, a course designed for students in Elementary Education. Many came in with a lot of baggage, from lack of basic computational skills to fear and outright hatred of mathematics. Dr. Lewis has many of them turning over a new leaf. This is done primarily through an activity called the Math Fair, involving large number of school children. The movement is catching on elsewhere in Canada, in the United States, Sweden, Taiwan and South Africa.

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President
Rod Fraser

invites all staff and students
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John T. Ferguson

for serving as the
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Tuesday, May 4, 2004

Alumni House

3:30 - 5:30 pm (program 4:00)

RSVP by April 19: 492-6534 or presrsvp@ualberta.ca
Questions: jackie.miller@ualberta.ca



important historical moment and issues of religion (particularly in the convent), but also for some of the most memorable music ever written. Location: SUB Stage (Student's Union Building, U of A campus, 114 St & 89 Ave). 7:30 p.m.

UNTIL JUNE 30

Beyond These Halls: Senate Community Service Recognition Program Tell us about your volunteer work! The University of Alberta recognizes and celebrates the valuable community service contributions made by faculty, staff and students through its BEYOND THESE HALLS: Senate Community Service Recognition Program. We are currently collecting information on volunteer con-

tributions made during the 2003 calendar year. Visit the website at www.ualberta.ca/beyondthesehalls and fill out the on-line submission forms (individual or group). The deadline for submissions is 30 June 2004. Last year, submissions ranged from large projects like a collaborative research initiative with not-for-profit groups to individuals volunteering as mentors to young scholars. Information will be compiled in a keepsake booklet and all participants will be invited to a recognition ceremony in September, 2004 at which time we will announce the results of the University's volunteer contributions for 2003. This year, special awards are being created such as Media Relations, Good Neighbor, Rising Star, New Initiative, and Exemplary Service. Location: TBA.

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CALL FOR APPLICATIONS FOR PIMS SITE DIRECTOR AT THE UNIVERSITY OF ALBERTA

The Steering Committee of PIMS is currently conducting a search for a site director of the PIMS site at the University of Alberta. All members of the Faculty of Science of the University of Alberta are eligible to apply and the term is for three years.

The PIMS site director will be a member of the PIMS executive committee and as such have direct input into the PIMS decision-making processes. He/she will attend the annual general meetings of the PIMS board along with the other five site directors. She/he will co-ordinate all PIMS activities at the U of A, convene and chair the steering committee and manage all funds at the U of A and supervise local PIMS staff.

Teaching relief and funds for PIMS-related NSERC-allowable expenses are available for this position. Interested persons should direct enquiries to either Bryant Moodie at 492-5742, or via e-mail: bryant.moodie@ualberta.ca, or Ivar Ekeland, e-mail: director@pims.math.ca.

JALISCO PARTNERSHIP DEVELOPMENT AWARD

The Jalisco Partnership Development Award was established to support continuing relationships with our priority partnerships in our sister state of Jalisco, Mexico. These are the Universidad Autonoma de Guadalajara, Universidad de Guadalajara, Instituto Tecnologico y de Estudios Superiores de Monterrey (ITESM-Guadalajara campus) and CONAFOR (National Forestry Agency). The award supports innovative practices that strengthen these priority partnerships by providing start-up funds for new initiatives such as student and faculty exchange, research and cooperative teaching.

The fund allocates a maximum of \$10,000.00 per year. Single or multiple year proposals are acceptable, and all reasonable expenses can be considered for funding provided they are not supported by any other source. The competition is open to University of Alberta faculty and staff. Application deadline: Monday, May 3, 2004.

For more information, including application forms and terms of reference, please contact University of Alberta International, 1204 College Plaza, Edmonton. Tel: 492-5840/e-mail: Cecilia.martinez@ualberta.ca. Or visit our website: www.international.ualberta.ca

INTERNATIONAL PARTNERSHIP FUND

The International Partnership Fund (IPF) was

established to support University of Alberta faculty and staff participating in exchange activities with the university's many partner institutions around the world. The fund provides financial support to faculty and staff engaged in the development and/or implementation of activities that contribute to sustainable and reciprocal relations with international academic partners. Awards may be used for travel by either the U of A staff/faculty member to visit an international partner, or for the faculty or unit to support a visitor from the partner. The fund favours activities that develop projects bringing an international focus to the academic, research and teaching mandate, and contribute to the internationalization objectives of the faculty. Support from the IPF will ideally complement multiple funding sources. Matching support from the individual and/or the department/faculty and partner institution is required. Note: The IPF only applies to those institutions with which the U of A has a formal agreement. For guidelines, application forms and list of eligible partners, please contact: University of Alberta International, 1204 College Plaza, Tel: 492-5840/e-mail: cecilia.martinez@ualberta.ca, or visit our website: www.international.ualberta.ca. Application deadline: Monday, May 3, 2004.

EFF - FSIDA (FUND FOR SUPPORT OF INTERNATIONAL DEVELOPMENT ACTIVITIES)

The deadlines for receipt of applications to the EFF - FSIDA are Oct. 15, 2004 and Jan. 15, 2005. This Fund exists to enable staff and graduate students (normally PhD candidates) of the University of Alberta to participate in research and in the international transfer of knowledge and expertise through partnerships in developing countries. Applications and guidelines are available on the University of Alberta International website <www.international.ualberta.ca> under "International Co-operation" and "Funding Opportunities" or from the FSIDA Secretary at University of Alberta International, 1204 College Plaza, 8215-112 Street, telephone 492-6440.

BOARD OF GOVERNORS AWARD OF DISTINCTION

Nominations are being sought for volunteers who have made exceptional contributions in linking the university with the broader community. A volunteer from each of the academic staff, support staff and general public will be recognized with an award. Nomination deadline is May 3, 2004. Please visit ualberta.ca/governors/distinction or call 492-4951 for information.

positions

The records arising from this competition will be managed in accordance with provisions of the Alberta Freedom of Information and Protection of Privacy Act (FOIPP). The University of Alberta hires on the basis of merit. We are committed to the principle of equity of employment. We welcome diversity and encourage applications from all qualified women and men, including persons with disabilities, members of visible minorities, and Aboriginal persons. With regard to teaching positions: All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority. For complete U of A job listings visit www.hrs.ualberta.ca

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The EO is responsible for creating and maintaining an effective administrative support system for the Office of the Senate and the Office of the Chancellor. Key responsibilities include helping to set and carry out priorities for the chancellor and senate; initiating and undertaking research on a wide variety of issues; providing advice; following up on decisions made by the chancellor, senate and its committees; acting on behalf of the chancellor where appropriate; and ensuring ongoing maintenance of the highest level of pro-activity and service in the day-to-day operations of the Office of the Senate and the Office of the Chancellor.

Specific accountabilities include liaison and communication, finance and budget, strategic planning, research and report writing, event and program organization and operation, meeting and committee resourcing, liaison with internal departments and external agencies, and overall management of the Senate Office and its staff. The EO will maintain the chancellor's schedule, draft correspondence, briefings and speaking notes and provide pro-active, high-quality administrative and strategic support.

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Application deadline: May 15, 2004

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WHO: Award of Distinction nominees exemplify the spirit of innovation, generosity and commitment upon which the University of Alberta was founded. We seek individuals or groups who have made exceptional contributions to link the University of Alberta with the local, provincial, national and/or international community. Awards of Distinction are given to alumni and non-alumni in three categories: Academic, Non-Academic and Community. **WHAT:**

Nominees are recognized for volunteer activities which promote goodwill between the University and the broader community and enhance the University's reputation for excellence. Established in 1997 by the Board of Governors to acknowledge the many extraordinary people who touch the University, Award of Distinction recipients are now enshrined on the University's Roll of Honour at the Timms Centre for the Arts. **WHY:** By nominating someone, you demonstrate your appreciation for their efforts, highlight the innovative individuals in your department or community and provide inspirational role models for the University's next generation of leaders.

HOW: The complete nomination form with criteria and eligibility information is available online at www.ualberta.ca/governors/awards or from the office of the Board of Governors at 492-4951.

 UNIVERSITY OF
ALBERTA

Nomination Deadline is **May 3, 2004**

Painting History

Dr. Henry Shimizu's art records a dark period in Canadian history

By Michael Robb

Shortly after the Japanese Imperial Forces bombed Pearl Harbor on December 7, 1941, an ill-tempered hysteria enveloped Canadians. RCMP seized 1,200 fishing boats and 1,500 motor vehicles owned by Japanese Canadians. Dr. Henry Shimizu's parent's hotel in Prince Rupert was confiscated and sold for a fraction of its value. The Dominion Hotel, the authorities decreed, would not be owned by Japanese Canadians.

The racist chorus grew louder. Schools and newspapers owned or run by Japanese Canadians across the province were "persuaded" to close. Many lost their jobs. Newspapers across the country demanded that Japanese Canadians be interned. Canadians feared the "fifth-column" in their midst.

In February, 1942, the federal government gave legislative authority to the racist hysteria in the streets and in the Legislatures, ordering the evacuation of all Japanese-Canadians, most lived in British Columbia, to isolated internment camps in B.C.'s vast, forested interior. The Shimizu family was among them.

The internment camp of over 2,000 inhabitants became a community. Bob's Ice Cream Parlour became a congregating point for idle teenagers. Bosun Hall provided the venue for swing dances. The bathhouse provided respite from the day's labour. And

Nishikaze's rock garden provided a place for the inhabitants of New Denver to reflect and contemplate their new lives.

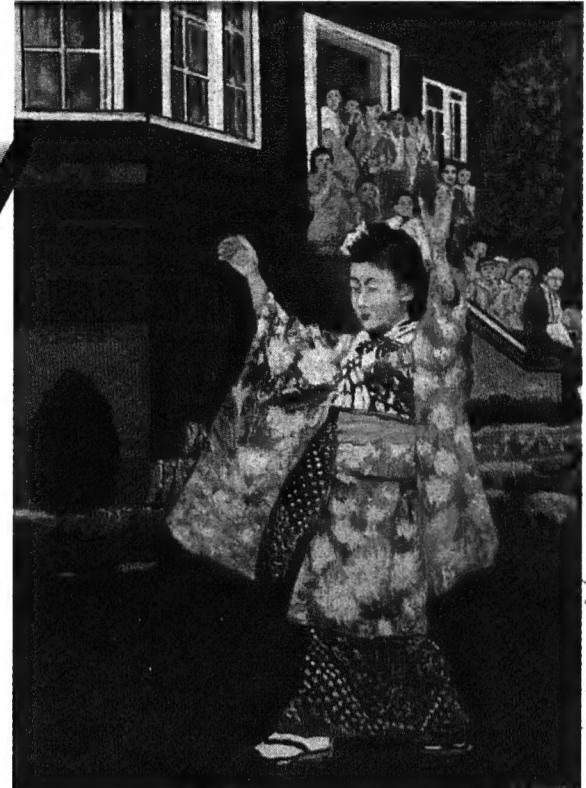
The inhabitants of New Denver accepted their circumstances, consistent with the Japanese tradition of "Shikata ga nai," translated as: it can't be helped.

Isolated and interned, accused of "un-Canadian" activities and treasonous activity, "the internment actually made us more Canadian," says Shimizu, noting the irony of the circumstances.

A few years ago Shimizu, who studied medicine at the University of Alberta, began to reminisce about his experiences in New Denver. He painted New Denver, followed that with Kool Kats and Hockey. His painting took on a new sense of urgency. "After I did those three paintings, I realized there was a series here. I collected photographs of the internment camp from people across Canada."

Other paintings followed, and steadily the mosaic of camp life took shape in his creative mind's eye. His works were recently on display at the Extension Centre Gallery.

Through it all, Shimizu never succumbed to bitterness. "My recollections of those times were more bittersweet. Overall, they weren't that sad at all." Yet, he says, it's important to remember the past so that history won't repeat itself. ■



Dr. Henry Shimizu's paintings of life at the New Denver internment camp portray a balance of Japanese and Canadian cultures. Clockwise from top right: *Bon Dori* is a Buddhist dance that commemorates ancestors; *Exile*: Leaving Prince Rupert Train Station depicts the journey of Japanese Canadians to the internment camp; *Bosun Hall* captures the spirit of life in the camp; and *Hockey* illustrates one of the ways Canadian culture became a part of camp life.



folio back page